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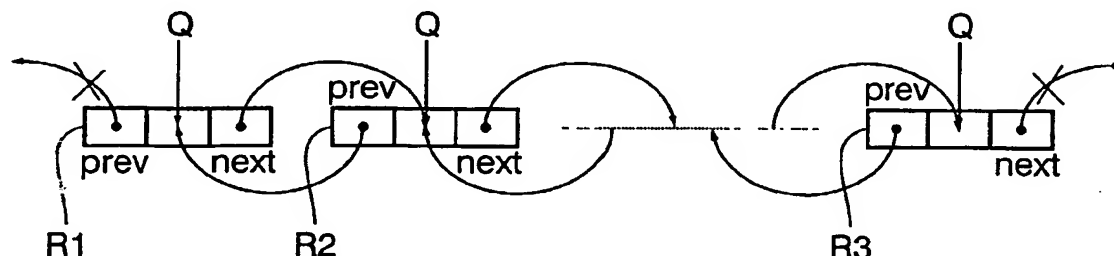
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(54) Title: DATA PROCESSING APPARATUS AND METHOD OF SYNCHRONIZING AT LEAST TWO PROCESSING MEANS IN A DATA PROCESSING APPARATUS



(57) Abstract: The present invention provides a data processing apparatus and a method of synchronizing at least two processing means in such a data processing apparatus which allow multiple readers to share the same queue. No locks or special instructions are needed to simultaneously access the queue administration information by multiple readers. No data is copied during the writing process. Furthermore, the present invention allows the application to dynamically reconfigure the single-writer multiple-reader queue, for instance to add or remove readers at run-time. This is achieved according to the invention by providing a branch record means comprising a primary branch record for a primary branch between a producer task and a first consumer task and secondary branch records for secondary branches between said producer task and further consumer tasks, said branch records storing appointed to the same location of the memory means and a reference to the next branch so as to obtain a linked list of branch records.